

Quality of Life: Assessment for Transportation Performance Indicators

Focus Group Report

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Executive Summary

‘Quality of life’ has multiple definitions yet specific indicators for transportation remain absent. As such, an opportunity exists for both academe and transportation professionals to better understand the relationship between quality of life and transportation. As the Minnesota Department of Transportation (Mn/DOT) seeks to align programs and services with citizen needs and expectations, evaluating what Quality of Life (QOL) means to the public and how it relates to transportation can inform Mn/DOT program and service delivery. Therefore, the purpose of this study was to assess and evaluate transportation-related quality of life indicators and the role of Mn/DOT programs and services in quality of life. Three inter-related approaches were undertaken: 1) a literature review, 2) focus groups, and 3) a questionnaire. This project reports on the focus groups.

Twenty-four focus groups, among different age groups and across Minnesota, qualitatively explored the factors that constitute quality of life and transportation. Conducted between August and November 2010, each focus group included between five and twelve participants, lasted about 90 minutes, and was digitally recorded. The data set includes the audio recordings, the flip charts generated in each session, and notes from each session. The data were analyzed through multiple audio reviews of the recorded discussions and meticulous reading and re-reading of the focus group notes. Textual data were organized in categories and sub-categories. During this coding process, similar themes were identified across focus groups and grouped under a representative name. Field notes from multiple facilitators added to data verifiability, as did researcher corroboration.

Similar to a 2009 Mn/DOT pilot study and previous literature, eleven factors made up quality of life and were generally uniform across ages, locality, and gender. The eleven factors most frequently used to describe quality of life included: 1) education, 2) employment and finances, 3) environment, 4) housing, 5) family, friends and neighbors, 6) health, 7) local amenities, 8) recreation and entertainment, 9) safety, 10) spirituality and individual psyche, and 11) transportation.

Seven inter-related factors emerged within the transportation system that contributed to or detracted from quality of life: access, design, environment, maintenance, mobility, safety, and transparency. Accessibility refers to access to destinations or people’s ability to reach the destinations they must visit in order to meet their needs and desire to visit to satisfy their wants. Design describes the physical layout of the transportation system and includes the multiple components that make up the system: roads, signs, and lights are basic design attributes. The environment is shaped and influenced by the transportation system. Maintenance is a broad category that describes road surfaces, paint indicators, general repair, and seasonal upkeep including snow and ice removal. Mobility describes movement, the actual process or experience involved with moving from one point or another and is defined as the movement of people from

one place to another in the course of everyday life (Hanson, 2010). Multiple safety hazards exist; physical conditions, human behavior, and the interaction among these factors. Respondents indicated transparency included communication, planning and finances. Each of these factors includes a variety of sub-themes.

When comparing results by age group, differences emerged. Specifically, access was most often discussed and a priority among the younger age group, focusing most on connectivity and the ability to reach destinations related to employment and family activities. Public transportation, a sub-theme of the access category, was also discussed most frequently by this younger age group. Access emerged among the middle age and older groups as well, but the discussion focused on service transportation, particularly among the older group. When comparing results by metro and non-metro location, differences emerged. Specifically, within the metropolitan area, accessibility was a greater QOL contributor and mobility was frequently described as a QOL detractor. The Twin Cities were described as accessible and the multiple transportation options were appreciated. Conversely, non-Metro groups more frequently noted access issues as transportation-related QOL detractors and expressed a desire for improved accessibility both within their area and to the Twin Cities. Mobility issues were often noted as transportation-related QOL detractors in the metropolitan focus group sessions but restricted mobility was not experienced as frequently by non-metro respondents. The few diverse focus groups conducted revealed additional insights into transportation. In particular, public transportation was seen as a significant contributor to an improved economic status, by providing access to employment.

Beyond quality of life questions, the sessions included questions on communication preferences and future transportation needs. Respondents identified four transportation system information sources: The Mn/DOT website, 511 system, radio and television, and newspapers. Of these, traditional media were most often used, but respondents indicated intentions to use the website and 511 systems in the future. Future transportation needs included all seven transportation-related quality of life themes. Respondents suggested design to match projected growth, thinking ahead to future needs using an inclusive and transparent process. Sustainable environmental management was encouraged, to reduce environmental impacts. Maintenance comments related to completing in-process projects and the need to develop more durable road surface materials and to introduce more efficient construction materials. Mobility ideas focused on increased travel speed, more free flowing traffic, less congestion, and reduced commute times. Safety concerns were described as ongoing, and participants described future safety concerns as similar to the safety issues of today, but acknowledging technologies opportunity to improve safety. With regards to transparency, respondents felt that overall communication between Mn/DOT and the public could increase and improve overall and suggested an enhanced online presence as one way to do so.

Results from this study illustrate specific transportation-related factors in quality of life and will inform the quantitative approach to understand them among Minnesotans.

Chapter 1

Introduction

“Quality of Life” has multiple definitions yet specific indicators for transportation remain absent. The Minnesota Department of Transportation (Mn/DOT) is a customer-driven organization with a responsibility to align deliverable programs and services with citizen needs and expectations (Pilot Study). One way to assess and understand customer needs and expectations is by evaluating what Quality of Life (QOL) means to the public and exploring how Minnesota residents describe their own quality of life.

Objectives

The purpose of this study was to understand how Minnesotans describe their quality of life as well as assess and evaluate transportation-related quality of life indicators and the role of Mn/DOT programs and services in quality of life. Three inter-related approaches were undertaken: 1) a literature review, 2) focus groups, and 3) a questionnaire. This project reports on the focus group portion of the project.

Study Method

Qualitative data were collected for this study through focused discussions. This section describes the methods used for this study in the following sections: approach, study setting, sampling, and data analysis.

Approach

To better understand the factors that influence Minnesota residents' opinions, experiences, and descriptions of quality of life, focus groups were used. Focus groups with Minnesota citizens, from different age groups and from all across the state, qualitatively explored

the various factors that constitute quality of life and captured citizens' stories and lived experiences in their own voices. This approach was used based on a 2009 pilot study where 5 focus groups were conducted in the metro (Woodbury and East Saint Paul).

Twenty-four focus group sessions were conducted between August and November, 2010. Focus groups were deemed to be most appropriate to elicit deep insights and perceptions to explore and describe the depth and breadth of the QOL concept. Each focus group had between five and twelve participants and standard focus group procedures were followed for each session (Krueger & Casey, 2008). Participants were given a cash gratuity in the amount of \$75 as a nominal incentive to participate. Participation was voluntary and all participants were assured of confidentiality and anonymity.

A guide for the focused discussion was developed and used during the pilot study in 2009 (Appendix A). This guide was reviewed and amended by University of Minnesota researchers and Mn/DOT representatives. The questioning route was then pilot tested on August 31, 2010 in the initial focus group meeting. The purpose of pilot testing was to ensure the questions were delivered in a conversational manner, easily understood by participants, and generated the type of information needed to address the research questions of interest. Approximately six questions were used, and the questions were grouped in a funnel sequence that progressed from simple warm-up questions to more meaningful questions. This technique created a permissive environment and first eased the participants into the focus group setting and encouraged everyone to speak; then later narrowed participant attention in on areas of research interest (Krueger & Casey, 2008; Goldenkoff, 2004). The opening questions were designed to introduce members of the group to each other get people comfortable talking. Next, transition questions probed participants to describe the various factors that contribute to or detract from their quality

of life. The facilitators did not define quality of life, instead participants were asked to reflect on their current life stage and describe the factors that influence their life and make-up their own quality of life. During these transition questions, the moderator listed all the quality of life factors on a flip chart and facilitated discussion to explore how each factor contributed to or detracted from quality of life. After the group had generated a complete list of factors describing quality of life, participants were asked to select and identify five factors that most contribute to quality of life and five factors that most detract from quality of life.

A set of key questions focused specifically on ways in which the transportation system contributes to or detracts from quality of life. The participants themselves had conceptualized a meaning for quality of life in the previous exercise and used this same framework to describe the impact the transportation system has on quality of life. Again, the moderator created a list of the contributing and detracting factors as the group generated ideas. During this discussion, participants were asked to think specifically about the Minnesota Department of Transportation and to describe how Mn/DOT could improve quality of life. Finally, closing questions explored participants' anticipated future needs from the transportation system and thoughts on how Mn/DOT could contribute to quality of life in the next generation. In conclusion, all participants were invited to make final comments on the topic of the transportation system and quality of life.

Each session lasted about an hour and a half, and refreshments were provided during the focus group. Each of the focus group discussions was digitally recorded. The data set for this study consists of the audio recordings, the flip charts generated in each session, and the research team's notes from each session.

Study Setting

The focus groups were conducted in thirteen communities across Minnesota; the locations were selected to capture a broad representation of the state. A variety of geographical areas were included as well as variety of community sizes including both metropolitan and micropolitan (Appendix B). At least one community from each of Mn/DOT's eight districts was represented and between one and three focus groups was conducted at each location.

The focus group discussions took place in easily accessible public meeting areas such as a library conference room or classroom. These settings created a neutral atmosphere and were convenient for area residents.

Sampling

A Twin Cities-based market research company obtained the sample from a telephone census-block purchased list. Participants from each community were grouped according to age to represent three major life stages: 1) younger life stage (age 20-34), 2) middle life stage (age 35-59), and 3) older life stage (age 60-75). Participants were screened to meet selected criteria, however, a very diverse sample was still recruited (Appendix C). The focus groups included a mix of ethnic diversity, age, and people who used multiple modes of transportation. All participants were screened to determine they met these criteria: live within the city limits of their community, live in the area at least the last three years, live in Minnesota at least the last five years, between the ages 20 and 75, drive or travel as a passenger at least 20 miles per week, as well as not employed with a company or agency that may bias responses (such as Mn/DOT).

Data Analysis

The data were analyzed through multiple audio reviews of the recorded discussions and meticulous reading and re-reading of the focus group notes. Each focus group session was first

summarized in a table to document the key themes and perspectives that emerged during the session. The multiple tables were then synthesized to facilitate a side by side comparison among the sessions. Finally, across cases, the textual data were organized in categories and sub-categories. During this coding process similar themes were identified across focus groups and were grouped under a representative name. Field notes from multiple facilitators added to data verifiability as did researcher corroboration.

Chapter 2

Results

A total of 215 Minnesota residents participated in 25 focused discussions between August and November, 2010 (Appendix B). These facilitated meetings across the state revealed multiple dimensions that contribute to and detract from area residents' quality of life as well as the variety of ways in which the transportation system influences quality of life. Findings that describe overall quality of life are presented first, and then transportation- related quality of life indicators. Next, findings are compared among the age groups, between the metropolitan area and the outstate regions and among select diverse groups. Finally, findings on communications and future needs related to the transportation system are presented.

Quality of Life

Focus group participants were asked to discuss the quality of their lives and identify factors that contribute to and detract from quality of life. The term "quality of life" was not pre-defined; instead, each group was encouraged to conceptualize what it meant in terms of their own life experiences. Across cases, similar themes emerged to describe quality of life. Notably the themes were reflective of the findings from the 2009 pilot study and also of the quality of life themes documented in existing literature. Similar to the pilot study, the factors that made up quality of life were generally uniform across ages, locality, and gender. Nearly all groups identified the same basic factors that make up quality of life; however, there was some variety in the discussion of how each factor contributed to or detracted from quality of life. The eleven categories most frequently were used to describe quality of life included: education, employment and finances, environment, housing, family, friends and neighbors, health, local amenities, recreation and entertainment, safety, spirituality and individual psychic, and transportation.

- Education: Pre-kindergarten through post secondary education contributed to overall quality of life across all the focus groups. The younger age group represented the most parents of school-aged children, and good local schools were considered the most important. Good schools were also identified as important features of a community and schools played a part in attracting residents to a town and motivating them to stay. Quality of education and access to higher education were other parts of this QOL factor.
- Employment and finances: Many QOL factors acted as simultaneous contributors and detractors. While financial safety and secure employment were cited as QOL contributors, other employment and financial concerns were frequently identified as QOL detractors. Having a job was important, as were opportunities for advancement. Job opportunities and the current state of the economy were listed as concerns, particularly among the middle age group. The younger age group identified student loans and being in debt as examples of financial strains.
- Environment: The lakes, good air quality, and the four seasons were frequently described as QOL contributors. However, for some Minnesotans, the winter season in particular was cited as a QOL detractor.
- Housing: Clean, safe and affordable housing was identified among the categories of quality of life. If housing was not affordable or safe, then housing became a detractor.
- Family, friends and neighbors: A social community made up of family, friends and neighbors was cited by all groups as an important QOL factor. Good neighbors and sense of a tight- knit community positively impacted QOL and was described frequently. Family relationships including spouse, children, parents, siblings, and extended family

were also important QOL factors, and proximity of family members also influenced QOL. The types of relationships varied by aged; however, this category emerged as an important QOL factor across all the focus groups.

- Health: Good health was cited a QOL contributor, while health problems or poor health was a serious QOL detractor. Health concerns were addressed most by the older age group but all groups described access to quality healthcare as a QOL contributor.
- Local amenities: All groups expressed a sense of regional or local pride and a strong community identity. A variety of local amenities were cited as participants described their quality of life. Examples include community services, clean streets, library, farmers market, local parks, shopping, town sized “just right,” and community situated with good access to surrounding towns and areas.
- Recreation and entertainment: Although examples of activities varied, recreation and entertainment was described as a QOL factor by all groups. Most frequently recreation and entertainment contributed to QOL, but in some cases the lack of recreation options or limited activities were described as QOL detractors.
- Safety: Safety was a top of mind QOL factor across all cases. A safe and secure neighborhood and community contributes to QOL. On the other hand, safety concerns and issues of crime, vandalism or violence are QOL detractors. Safety issues were described most by the middle and older age group.
- Spirituality and individual psyche: Faith in a higher power and involvement in church or a religious community contributed to QOL. Individuals differed in practices and beliefs, but spirituality consistently added to QOL among participants. Individual psyche

included descriptions of feelings of peace and freedom; some examples include relaxing and enjoying free time, valuing honesty, visiting a peaceful area, and feeling rooted in an area.

- Transportation: This category was described as both a detractor and a contributor.

Participants also noted that transportation was interrelated with other QOL factors.

Specifically, respondents discussed how transportation facilitates other QOL factors. For example, respondents relied on transportation to enjoy local amenities, access to health care facilities, connect with family and friends, and travel to work. Transportation QOL contributors include safe roads, ease of getting around, convenient access to destinations, a variety of transportation options, and good snow removal. Transportation issues were also identified as QOL detractors in some cases: long commute times, construction detours and delays, dangerous road areas, and distracted drivers.

Transportation System and Quality of Life

Participants described the primary factors within the transportation system that contributed to or detracted from quality of life. Notably, respondents seemed very unclear about transportation system jurisdictions. Rather than a concern with who managed the transportation systems, respondents were concerned about the systems themselves. The most frequently mentioned factors included access, design, environment, maintenance, mobility, safety, and transparency. These seven concepts are inter-related. For example, safety is influenced by maintenance of road surfaces and mobility or movement depends first on access to destinations. Focus group participants across cases discussed these concepts both in terms of contributing to and detracting from quality of life. Within each of the categories, subthemes emerged providing additional depth of meaning to the construct (Appendix D).

- Access: Accessibility refers to access to destinations or people's ability to reach the destinations they must visit in order to meet their needs and desire to visit to satisfy their wants (Center for Transportation Studies). Much of the existing research as of 2010 has measured access in terms of people's ability to reach a destination in a personal automobile. This auto-based conceptualization is limited and measures of access are expanding to reflect the variety of access opportunities people may reach their destinations. As such, subthemes of this category include: public transportation, service transportation, air travel, non-motorized transportation, trains and light rail transit.
- Design: The concept of transportation system design is particularly related to access and mobility. Design describes the physical layout of the transportation system and includes the multiple components that make up the system (e.g. roads, signs, and lights). Local neighborhood streets, regional roads, and interstate connections are all dynamic; as such, design improvement emerged as a subtheme in this category. However, these changes require funding and subsequently, costs emerged as another subtheme. In some cases the physical layout of the transportation system was easy to use and expedited travel, in other cases the layout was poor and confusing to use. Related to this, quality and efficiency were additional subthemes of design.
- Environment: Several characteristics of the environment are shaped and influenced by the transportation system. Respondents noted carbon emissions and air pollution as subthemes for this category. Beyond atmospheric emissions, the transportation system is also responsible for adding considerable sound and light to the environment, and, as such, noise and light pollution are additional subthemes of this category.

- Maintenance: Maintenance is a broad category that describes road surfaces, paint indicators, general repair, and seasonal upkeep. Potholes and other poor road surfaces can negatively influence pavement ride quality and reduce customer satisfaction with state highway maintenance. Snowfall and Minnesota winters make seasonal maintenance particularly important. Therefore, respondents described subthemes of this category that included road quality, snow and ice removal, and efficiency.
- Mobility: Mobility describes movement, the actual process or experience involved with moving from one point or another. Mobility is defined as the movement of people from one place to another in the course of everyday life (Hanson, 2010). While access is required for people to reach desired destinations, mobility refers to the physical movement to get there. This concept of mobility describes movement, such as congestion or free flowing traffic, travel time and total hours of delay. Subthemes of this include: traffic flow, commute time, construction, congestion, and travel time within and between communities.
- Safety: Safety emerged as a primary category in discussing transportation related quality of life indicators. Multiple safety elements exist: physical conditions, human behavior, and the interaction among these factors were frequently described as safety concerns. Driver behavior emerged as an important subtheme related to safety: distracted drivers as well as speeding drivers were mentioned most frequently. Other safety subthemes included troubled intersections or poorly marked streets, railroad crossings, and interactions between vehicles and bikers or pedestrians.
- Transparency: Several subthemes emerged in the focus groups adding depth and breadth to the concept of transparency. Communication in its various forms appears to be most

associated with transparency; specific subthemes include communication about finances and planning.

Transportation System and Quality of Life: Comparisons by age group

Each focus group defined quality of life and identified the ways in which the transportation system impacts QOL. Many similarities emerged across all the groups, specifically the seven major themes described above were discussed by all participants. However, the importance of each theme and the examples mentioned differed among the groups. Those age group differences are presented below.

- **Younger Age Group:** For this age group, discussions around the transportation systems focused most on access, specifically connectivity and ability to reach destinations related to employment and family activities. This group represented a variety of young professionals and also young parents; as such, their experience with the transportation system was primarily related to travel associated with employment, schools, and shopping. Public transportation, a sub-theme of the access category, was also discussed most frequently by this age group. Participants in the younger aged focus group sessions identified ways in which public transportation was both a contributor and a detractor to QOL. Light rail, inexpensive options, access to multiple destinations, park and rides at bus stops, and free bus rides for children and students were mentioned as public transportation QOL contributors. On the other hand, long waits for the bus and limited distances and destinations available with public transportation were identified as QOL detractors.
- **Middle Age Group:** Much of the discussion among the middle age group participants was an overlap between the younger and older groups. Access was an important QOL factor

within the transportation system, and service transportation options were discussed frequently in addition to public transportation options. Examples of service transportation, a sub-theme of the access category, include taxi service, dial-a-ride, door-to-door bus services, and grocery and drug store deliveries. Service transportation was generally a QOL contributor; however, limited hours and schedules for some of these services were identified as QOL detractors.

- Older Age Group: This group experienced the transportation system differently because nearly all the participants in the older age group were retired or not employed full time. This group talked about the transportation system primarily in terms of access to health care, shopping, leisure travel, visiting family, and other personal trips. Much more than the younger group and somewhat more than the middle age group, the older age group identified service transportation as the most important sub-theme of the access category. Like the middle age group, service transportation was frequently a QOL contributor; examples include taxi service, intercity shuttle service, medical van service, home pick-up options, and specialized services such as meals on wheels and other medical services. The cost of some of these services and limited availability were mentioned as QOL detractors. For all groups, particularly the middle and the older age group, safety was a top of mind transportation QOL factor. The middle group and older age group also had transportation system related safety factors as top of mind contributors to QOL. Examples of such factors include flashing emergency lights, rumble strips, brighter lights and intersections, and overhead signs giving advance warning about a crash, road conditions, or other safety hazard.

Transportation System and Quality of Life: Metropolitan area and non-metro Minnesota

At least one focus group was conducted in each Mn/DOT region, and a many communities were represented, including several Twin Cities Metropolitan groups and a variety of towns and cities outside the metro. Each group experienced the transportation system somewhat differently as a result of its specific locality; overall, differences emerged particularly between metropolitan area groups and non-metro groups. Across the state, the same seven main categories were identified as ways in which the transportation system influences QOL; however, certain factors were emphasized more by non-metro Minnesota groups while other factors were more important to the metropolitan groups.

- Access: Within the metropolitan area, accessibility was a greater QOL contributor and mobility was frequently described as a QOL detractor. Access, or the ability to reach destinations, was mentioned as a positive aspect to living in the metro area. The Twin Cities were described as accessible, and participants explained that multiple transportation options are available to connect people with destinations. This variety of transportation modes included light rail, public bus, private bus, shuttles, personal automobile, light rail, air travel, and non-motorized transportation. As participants discussed non-motorized transportation, the idea of connectivity and access again emerged as a QOL contributor. Specifically the Greenway trail in Minneapolis and the Grand Rounds facilitated access to destinations by bike or on foot.

On the other hand, non-metro focus groups participants more frequently noted access issues as transportation-related QOL detractors. These respondents described different transportation modes as limited as the variety of options available as insufficient.

Participants explained that their ability to reach regional destinations was restricted, and

connectivity to the Twin Cities was inadequate. Non-metro focus group participants expressed a desire for improved accessibility and noted that increased transportation options with a greater variety of destinations and longer distances would enhance access.

- Mobility:** Mobility issues were often noted as transportation-related QOL detractors in the metropolitan focus group sessions. Mobility describes movement, and participants in these groups experienced several factors that inhibited quick and efficient movement. Such factors that restricted mobility include rush hour traffic, congestion, long commute times, road construction and delays.

Restricted mobility was not experienced as frequently by non-metro respondents compared to focus group participants in the metro area. In fact, several examples of mobility were noted as transportation-related QOL contributors by outstate respondents: increased speed limits on the freeways, roadways expanded to four lanes, and added bridges and bypasses. These features decreased travel time and efficiently streamlined movement during travel.

Transportation System and Quality of Life: Findings among select diverse groups

To capture viewpoints from some of the diverse groups that make up the Minnesota population, a limited number of focus groups were conducted. These sessions included an American Indian group, an African/African American group, a Hispanic group, and a group of people from various areas of Asia. Due to the limited data, the statements and themes expressed in these sessions are not generalizable, but provide emerging population perspectives.

The eleven quality of life and seven transportation-related quality of life factors emerged in these groups, like the others. However, participants in these groups described some of the distinctive ways in which transportation-related factors presented quality of life constraints. One participant

in Willmar noted that “Transportation is a barrier for getting out of poverty, especially in rural areas.” English was not a first language for all respondents, and one person stated that “Language is a barrier for transportation” (Willmar). Public transportation was an important theme in the diverse groups. Many participants relied on public transportation to reach destinations, and the accessibility provided by public transportation was frequently described as a QOL contributor. However, some concerns were also expressed in regards to public transportation. These participants felt that public transportation did not always meet the needs of the users. One participant explained the issue this way: “People making decisions (about public transportation) don’t see the need because they don’t use it” (Bemidji). Further, the public transportation experience was sometimes uncomfortable for members of diverse groups.

Transportation System and Quality of Life: Communications

Participants were asked to describe where and how they obtained information about Mn/DOT activities and projects. Many people stated they did not know where to get such information and some expressed frustration at being unable to locate details about Mn/DOT’s activities.

Respondents identified the following as sources of information about Mn/DOT: The Mn/DOT website, 511 system, radio and television, and newspapers.

- Mn/DOT website: The Mn/DOT website was mentioned in all the focus group sessions as an information source; however, in general, less than half the participants had actually used the site. The younger and middle age groups had the most experience using the website. The older age group, although less likely to visit the website, did use technology such as GPS, Google maps, and other websites. Across all the age groups, the website was identified as the most used source of information about Mn/DOT

activities such as construction, weather conditions and road closures. All groups suggested that Mn/DOT publicize their website more.

- 511 System: Across all focus group sessions, participants had very limited knowledge of and experience with the 511 system. The system was most frequently used by the middle age group. Across all age groups, comments were mixed about the ease and usefulness of the 511 system. Many participants noted that although they had never used the 511 system, that they intended to use it in the future.
- Radio and Television: These sources of information were identified more frequently by the middle and older age groups than the younger age group. The non-metro middle and older age groups indicated they relied on local radio news as a major source of local and regional road information. The older age group most frequently mentioned television as a source of news and information.
- Newspaper: The younger age group mentioned newspapers least frequently as a source of information about Mn/DOT activities. The middle and older age groups described reading local newspapers, rather than state or national publications, as a source of information.

Transportation System and Quality of Life: Future needs

Participants were asked to forecast future needs related to the transportation system, both for the near-term and the long-term future. Similar overall transportation-related categories emerged in the future needs as in the general discussion.

- Design: Design considerations were particularly important in the discussion of future needs. Participants mentioned the need to design transportation projects to match projected

future growth and development, and they emphasized the need for an inclusive and transparent design process where citizens are involved and information about jurisdictions and priorities are clear. In addition, respondents noted the need to be proactive in designing today to meet the needs of future conditions. For example, several groups forecast increased use of electric cars in the future and stated that the future need for charging stations should be considered in the design process. A major theme related to future transportation needs had to do with increased capacity. Several groups claimed that soon another beltway or a new beltway would be needed and that future design must focus on growth, new construction, and increased capacity. In addition, light rail, and to a lesser extent, high speed rail, were mentioned as opportunities to address future transportation needs. However, costs were of concern with the various mass transit and rail options proposed.

- Environment: Across cases, participants were aware of the environmental implications and problems associated with the transportation system. When assessing future needs, respondents noted environmental considerations and an increasing need to plan for sustainable environmental management. Development and growing the transportation system will impact the environment and increase pollution; Minnesotans are aware of this impact and expressed the need for improved environmental solutions.
- Maintenance: The topic of maintenance relates to regular upkeep, ongoing projects, and new construction. Many focus group participants explained that in the near future they would like to see existing projects completed; specifically, respondents hoped that construction of the current system would be finished before any new projects were started. Projecting into the long-term future, participants described the need to develop

more durable road surface materials and to introduce more efficient construction materials.

- Mobility:** Mobility was a top-of-mind category in the discussion of future transportation-related needs. Participants would like to see increased travel speed, more free flowing traffic, less congestion, and reduced commute times. The proposed ideas to enhance and improve mobility include: Add passing lanes, widen roads and add lanes, provide express commuter lanes, develop new beltways and bypasses, add more over and underpasses, increase use of round-a-bouts, and develop system to better match routes, speed limits and stop light timing.
- Safety:** Safety concerns were described as ongoing, and participants described future safety concerns as similar to the safety issues of today. However, the focus groups did identify a number of possible future safety improvement measures they hoped to see implemented in both the near and long-term future. Participants agreed that rumble strips serve as effective safety precautions and as such, would like to see more rumble strips used in the future. Other future safety measures included: development of accident avoidance technology, development of new safety features in new vehicles, increased and improved road signage, safer highway entrances and exits, and development of snow melting systems.
- Transparency:** The sub-themes of communications and planning emerged as the most important in the discussion of transparency both now and in the future. Participants described a need for Mn/DOT to be more open and encouraged an increased online presence for the agency. Minnesotans in these focus groups stated they want access to information about Mn/DOT's projects and priorities. Respondents felt that overall

communication between Mn/DOT and the public could increase and improve overall. In the future, participants expressed an interest in Mn/DOT serving the system-users and reducing politics in the Department.

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Appendix A

QUALITY OF LIFE & TRANSPORTATION STUDY

DISCUSSION GUIDE

INTRODUCTION/LOGISTICS *(approximately 10 minutes)*

- Good _____ *(morning/afternoon/evening)* and welcome. Thank you very much for taking the time to participate in our discussion today
- My name is _____ and this (these) is (are) my colleague(s) _____. We are from the University of Minnesota and will be conducting the focus group today
- The purpose of this focus group is to discuss the idea of “quality of life” and the impact of the transportation system on your quality of life. This is one in a series of discussions across the state addressing this topic.
- We have allowed up to 2 hours to complete our discussion but we hope to finish before that time
- Before we get started with our discussion, there are a few logistics we need to take care of
 1. Is there anyone that can't stay for the full conversation? *(note who they are and make sure they sign their receipt and get paid before they leave)*
 2. Has everyone signed the attendance register and received your payment?
 3. You will note the audio recorder on the table. The purpose is simply to make sure we capture all of the discussion. This focus group is one of a series of focus groups being held. We will be responsible for writing a final report and reviewing the audio tapes will help us do that. The tapes have no other purpose.
 4. You also note there are several observers in the room. They are interested in the discussion but will not be taking part in the discussion. *(We will introduce them at the end of the discussion, if questioned)*
 5. We have light refreshments available. Please feel free to get them at any time.
 6. Rest rooms are located _____
- One final note before we begin: as we stated at the beginning, we are interested in your perceptions of the impact of the transportation system on your quality of life. This is for research purposes only. You are not obligated to participate in this focus group but your responses will help inform decision making. All of your responses are confidential and will be combined with others in the study and your name is not known to the agency or the public *(required Tennessee warning)*

PARTICIPANT INTRODUCTIONS & WARM-UP QUESTION

To help us get a bit better acquainted, we would like to begin with a question for all of you about the area in which you live

Q1. Please introduce yourself and tell us where you live and how long you have lived there
(approximately 10 minutes)

As you think about your community.....

- What things were you looking for when you moved into the area? *(or, if they have lived in the area all of their lives, what has motivated you to stay in the area?)*
- What was it, in particular, that drew you to the area?

TRANSITION QUESTIONS

Now, let's shift into the discussion of ~~quality~~ "quality of life". This is a very broad topic and one that is very subjective. What I might consider important to my quality of life, you may think differently. There are no right or wrong answers. For the purposes of this question, we would like you to think about the quality of your life right now, at this particular time. So, the question is.....

Q2. How would you describe the factors that describe and make up your own quality of life?
(approximately 15 minutes)

The list could be quite varied—it might be positive or negative—there might be several things that influence and define your life. To help us think about this question, we would like you to jot down one or two words or a short sentence on the paper we have provided. We don't expect an autobiography. The things or factors you write down may be quite different from the others because each person deals with different situations and circumstances in life. This will be a ~~jumping off~~ "jumping off" point for our discussion.

(repeat the question)

(provide ____ (2-3) _____ minutes for them to complete their lists)

To help us keep your responses in front of us, we are going to jot them down on the easel pad so that we can all refer to them. How did you respond to the question? Who would like to start?

- How did you respond to the question?
- What else should be added?
- Is there anything missing?

(Dot rating exercise - Approximately 15 minutes)

Now, we would like to take this one step further. We would like you to think about what you had originally written down on the paper, what others had said about their quality of life and anything else you might want to consider about the things or factors that impact your life and make-up your own ~~Quality of Life.~~"

Each of you have 10 colored dot stickers ---5 blue and 5 yellow. We would like all of you to come up and place your BLUE dot stickers next to the factors that you consider to **detract from** your quality of life. Place your YELLOW dot stickers next to the factors that **contribute to** your quality of life

If one of the categories that is a major contributor to your Quality of Life or a detractor from your Quality of Life is not shown, write on the list what should be there and add it to the list we have created.

(Give participants ____ (8-10) _____ minutes to complete the task)

- What do you notice about your respective lists?
- What are the similarities? Differences?

KEY QUESTIONS

Still thinking about your perceptions of “Quality of Life,” we’re going to narrow the discussion to the transportation system. The question is.....

Q3. How does the transportation system influence or impact your quality of life? *(Approximately 15 minutes)*

As you did before, we would like you to write down some words that describe how the transportation system impacts your quality of life. They may be words that describe how it **contributes** to your quality of life or they may be words that describe how the transportation system **detracts** from your quality of life

(Provide ____ (5) _____ minutes to complete the task)

Let’s start by listing on the easel pad the items you wrote down. First, let’s note what you wrote down about how the transportation system **contributes to** your quality of life.

- What else?
- Are we missing anything?
- What stands out for you about this list?
- Tell us a bit more about _____

How about the things that **detracts from** your quality of life

- What else?
- Are we missing anything?
- What stands out for you on this list?
- Tell us a bit more about _____

What part of the transportation could you do without ---what is not as important as other parts?

CONCLUDING QUESTIONS

Think now about the transportation system and the Minnesota Department of Transportation (MnDOT)

Q4. How can the Minnesota Department of Transportation (MnDOT) improve your quality of life? *(Approximately 10 minutes)*

- What do you think your needs will be from a transportation system in the near future?
- What do you think Mn/DOT could do to help make certain that those needs are met?
- How do you get information about MnDOT? What MnDot is doing?
- Have you used Mn/DOT’s website? What do you think of the site?

- Thinking about the near future (4-5 years) are there things that MnDOT could/should be doing to improve your quality of life?

Think about the next generation *(your grandchildren for O/M group; your children for Y group):*

Q5. What could MnDOT be doing to contribute to the next generation's Quality of Life?

(Approximately 5 minutes)

- What else?

Q6. Is there anything else that you would like to comment on before we close? *(Approximately 5 minutes)*

Thank you very much for your participation in this focus group. As we mentioned at the beginning, the results of this, and all of the other focus groups, will be used for research purposes to provide a better understanding of customer needs and demands on the transportation system. MnDOT will use the information to assess customer needs. Have a safe journey home and thanks again.

Appendix B

Mn/DOT Quality of Life Focus Group Schedule-2010					
Date	Community	Age¹ or diversity of group	Time	Total Participants	Mn/DOT District (number)
August 31	Minneapolis	Middle	Evening	12	Metro (5)
September 2	Rochester	Older	Afternoon	12	Rochester (6)
September 2	Rochester	Younger	Evening	11	Rochester (6)
September 7	Bloomington	Older	Afternoon	11	Metro (5)
September 8	Mankato	Middle	Afternoon	11	Mankato (7)
September 8	Mankato	Younger	Evening	10	Mankato (7)
September 9	Mankato	Older	Morning	12	Mankato (7)
October 6	St. Cloud	Younger	Evening	8	Baxter/St. Cloud (3)
October 7	St. Cloud	Middle	Morning	8	Baxter/St. Cloud (3)
October 7	Willmar	Middle	Evening	7	Willmar (8)
October 8	Willmar	Older	Morning	7	Willmar (8)
October 13	Duluth	Older	Afternoon	8	Duluth (1)
October 13	Duluth	Younger	Evening	5	Duluth (1)
October 14	Virginia	Middle	Afternoon	7	Duluth (1)
October 20	Bemidji	American Indian	Afternoon	10	Bemidji (2)
October 20	Bemidji	Younger	Evening	8	Bemidji (2)
October 21	Bemidji	Middle	Morning	7	Bemidji (2)
October 22	Brainerd	Older	Morning	7	Baxter/St. Cloud (3)
October 26	Willmar	Hispanic	Afternoon	8	Willmar (8)
October 27	Minneapolis	African American	Morning	10	Metro (5)
October 27	St. Paul	Mixed Asian	Afternoon	8	Metro (5)
October 28	Minneapolis	Younger	Evening	9	Metro (5)
November 3	Detroit Lakes	Older	Afternoon	9	Detroit Lakes (4)
November 10	Alexandria	Middle	Afternoon	10	Detroit Lakes (4)

¹Note: younger life stage (age 20-34), middle life stage (age 35-59), and older life stage (age 60-75)

Appendix C

Quality of Life Telephone Screener

NAME (CHECK SPELLING):			
ADDRESS:			
CITY:		ZIP:	
HOME PHONE:			
WORK PHONE:			
E-MAIL:			
COMMUNITY:		AGE GROUP	
AGE GROUPS	MINNEAPOLIS	1	(Y)
Younger Life Stage (20-34)	DETROIT LAKES	2	(O)
Middle Life Stage (35-59)	ANOKA	3	(Y)
Older Life Stage (60-75)	ALEXANDRIA	4	(M)
INTERVIEWER	DATE	SUP	
Letter sent:	On grid:	Rem #1:	Rem #2:

ASK FOR ADULT IN HOUSEHOLD

INTRO: Hello, I am _____, calling for the U of MN from CJ Olson Market Research. Mn/DOT (pronounced —~~in~~dot” is interested in your perceptions of the impact of the transportation system on your quality of life and this is for research purposes only. You are not obligated to do this survey but your responses will help inform decision making. All your responses will be combined with others in the study and your name is not known to the agency or the public.

Today we are recruiting participants for a discussion group. This group will be about 1 ½ -2 hours in length and those who participate will be paid \$75 for their time. I just have a few questions to see if you qualify.

A. To begin, do you live within the city limits of (THIS COMMUNITY)? (CIRCLE CODE)

YES (CONTINUE)
 How far are you from (this community) Estimated # of miles _____
 NO (THANK AND TERMINATE)

B. And, how long have you lived in (THIS COMMUNITY)? (WRITE IN)

RECORD NUMBER OF YEARS _____.. (MUST HAVE LIVED IN CURRENT AREA FOR
PAST 3 YEARS TO QUALIFY)

C. How long have you lived in the state of Minnesota? (WRITE IN)

RECORD NUMBER OF YEARS _____.. (MUST HAVE LIVED IN MN FOR THE PAST 5
YEARS TO QUALIFY)

D. Do you or does anyone in your family currently work or have worked in any of the following
fields? (READ LIST & CIRCLE CODES)

	YES	NO	
An advertising or promotions firm...	...1...	...2...	(IF YES, THANK AND TERM)
A radio or TV station, newspaper or magazine.....	...1...	...2...	(IF YES, THANK AND TERM)
A survey or market research firm.....	...1...	...2...	(IF YES, THANK AND TERM)
City, County or state government or political arena1...	...2...	(IF YES, THANK AND TERM)

E. In a typical week, how far would you say to drive or travel as a passenger? (READ LIST &
CIRCLE CODE)

Less than 5 miles	1 (THANK AND TERMINATE)
5-9.....	2 (THANK AND TERMINATE)
10-19.....	3 (THANK AND TERMINATE)
20-29.....	4
30-39.....	5
40-49.....	6
50 or more miles.....	7
DON'T KNOW/ REFUSED	9 (THANK AND TERMINATE)

F. During the week, do you typically travel in the morning or afternoon?

YES.....

NO.....

1. In order to make certain that we interview a good cross-section of the population, we are
attempting to include persons from all age groups. Which of the following categories
includes your age? Please stop me when I get to the right range. (READ LIST & CIRCLE
CODE)

Under 20.....	1 (THANK AND TERMINATE)
20-24.....	2
25-34.....	3
35-44.....	4
45-54.....	5

55-59.....	6
60-69.....	7
70-75.....	8
76 and older.....	9 (THANK AND TERMINATE)
REFUSED	99 (THANK AND TERMINATE)

2.RECORD GENDER. (DO NOT READ, CIRCLE CODE)

FEMALE	1
MALE	2

3.Are you Spanish/Hispanic/Latino? (CIRCLE CODE)

YES	1
NO	2
DON'T KNOW/ REFUSED	9

4.Do you consider yourself to be...? (READ LIST & CIRCLE ALL THAT APPLY)

White	1
Black or African American	2
American Indian or Alaskan Native	3
Asian, Native Hawaiian or other Pacific Islander	4
Some other race	5
DON'T KNOW/ REFUSED	9

FOCUS GROUP INVITATION – (SELECT SESSION TIMES AVAILABLE BASED ON AGE IN Q1.)

Based on your responses, we would like to invite you to participate in a discussion group for which you will be compensated \$75 for your time. The group will consist of about eight people and a facilitator who guides the discussion and reports what the group has to say. I think you will find the discussion to be interesting and enjoyable. You don't have to do anything to prepare. The discussion group will be held on [Day/Date/Time/Location]. The session will last almost two hours, and again you'll be paid \$75 in cash as a token of appreciation and for parking.

We are holding our discussion groups on (DATE). Are you available to attend at (TIME) on that day? **(CIRCLE CODE)**

YES.....	1	SEND LETTER
NO.....	2	THANK, TERM, TALLY AS QR
DON'T KNOW/ REFUSED	3	THANK, TERM, TALLY AS QR

	Q1	DATE/ TIME
GROUP 1	AGES 20 - 34	
GROUP 2	AGES 35 - 59	
GROUP 3	AGES 60 - 75	

You will receive the cash payment of \$75 for participating after the session is completed. We'll be sending you a letter confirming your participation and details on the location. This letter will include a map with directions to the location.

ASK OF ALL PEOPLE WHO AGREE TO PARTICIPATE:

Since you have agreed to take part, I would like to verify your name and get your address to mail you the information.

What is your preferred name? We'll put it on your name card.

RECORD _____

CLOSE BY SAYING: Those are all of my questions. If you wear glasses to read or to watch TV, please bring them with you. One final thing, only you are to attend, if you bring any family or friends, they will not be able to participate. We'll see you on [Day/Date/Time]. We'll be sending you the letter shortly. Thank you for your time and thank you for agreeing to participate in this discussion group.

RECORD ALL INFORMATION ON THE FRONT PAGE. BE SURE TO VERIFY ALL NAMES AND ADDRESSES FOR CORRECT SPELLING.

Appendix D

Quality of Life Categories: Definitions, subthemes, and examples

Category:	Access				
Definition:	Accessibility refers to access to destinations or people's ability to reach the destinations they must visit in order to meet their needs and desire to visit to satisfy their wants (CTS).				
Subthemes:	Public Transportation	Service Transportation	Air Travel	Non-motorized Transportation	General access
Examples (Contributors)	<ul style="list-style-type: none"> •Local bus system •Free for students •Express bus •LRT options •Amtrak services •NorthStar •Intercity bus •Bus improvements and route & destination expansion •Dial-a-ride 	<ul style="list-style-type: none"> •Taxi service •Medical van service •Shuttles to twin cities •Specialized service, door to door •Dial-a-ride 	<ul style="list-style-type: none"> •Regional airports •Access to MSP •MSP good airport •Good connecting flights •Multiple carriers 	<ul style="list-style-type: none"> •Recreation trails, bike, walk horse, hike, trail connectivity •Paved bike, walk trails •Can bike anywhere, commuter lanes in town •Skyways & subways •Expansion of bike/walk routes & destinations 	<ul style="list-style-type: none"> •Road access in/out of town •Plenty of roads and alternate routes •Multiple ways to get around town •Compactness of city •Proximity to all places in-town and out, "network" is significant
Example: (Detractors)	<ul style="list-style-type: none"> •Lack inter-city bus, need bus to Twin Cities •Not enough LRT •Need more bus routes & destinations •Inadequate rail, need more •Missing bus connections, long waits 	<ul style="list-style-type: none"> •Taxi expensive •No dial-a-ride on weekends 	<ul style="list-style-type: none"> •Price to fly out of small airports •Limited carriers •Lack regional airports •Expensive •Cheaper to drive to MSP than shuttle or fly 	<ul style="list-style-type: none"> •Need more bike trails •Too many bikes on highway •Need more sidewalks •Add more bike lanes •Extend bike/walk lanes and options 	<ul style="list-style-type: none"> •Lack of alternate routes to/from town •Limited options to travel to Twin Cities •No good way to get to certain areas

Category:	Design			
Definition:	Design describes the physical layout of the transportation system and includes the multiple components that make up the system; roads, signs, and lights are basic design attributes.			
Subthemes:	Quality & Efficiency	Signage	Lights	Costs
Examples (Contributors)	<ul style="list-style-type: none"> •Easy to follow streets •Scenic drives •Round-a-bouts good when people know how to use 	<ul style="list-style-type: none"> •Good highway signs • Well marked speed limits, mile markers and signs •Alternative routes & detours well marked 	<ul style="list-style-type: none"> •Well timed lights 	
Example: (Detractors)	<ul style="list-style-type: none"> •Confusing city grid/street names/planning •Round-a-bouts confusing & dangerous, need education •Poor design combined on/off ramp •Dead ends •Trouble intersections •No shelters at bus stops 	<ul style="list-style-type: none"> •Signs/indicators inconsistent, poor design, especially across state lines •Stop sign, right of way uncertainty 	<ul style="list-style-type: none"> •Too many light •Poor timing with LRT on Hiawatha •Stoplights slow commute •Motorcycles don't trip the turn lights •Stop lights timing is off, poor timing •Need flashing yellow light to warn upcoming stop light 	<ul style="list-style-type: none"> •Cost of HWY 10 •Cost to bring rail to Willmar greater than benefit •Cost of bridge, maintenance (e.g. 35W \$250 million) Takes \$ away from others, balance project priority decision •Diamond express lanes, very expensive, hardly used

Category:	Environment		
Definition:	Parts of the environment are shaped and influenced by the transportation system. Transportation fuel consumption contributes to air pollution; the transportation system also adds considerable sound and light to the environment.		
Subthemes:	Air pollution	Sound pollution	Light pollution
Examples (Contributors)		<ul style="list-style-type: none"> •Reduced noise in some areas •Lack of air traffic, no noise •Quiet zone for rail road 	
Example: (Detractors)	<ul style="list-style-type: none"> •Car-centric culture negatively impact air quality and health •Idle buses increase air pollution •Increased carbon emissions with more cars on the road 	<ul style="list-style-type: none"> •Sound - wider roads, now more traffic, much louder, need quieter roads, sound pollution •Increased noise as road system expands •Noise pollution from trains 	<ul style="list-style-type: none"> •Light pollution •Intersections too bright •LED stop lights too bright •Light pollution from city street lights •

Category:	Maintenance		
Definition:	Maintenance is a broad category that describes road surfaces, paint indicators, general repair, and seasonal upkeep including snow and ice removal		
Subthemes:	Road quality	Snow removal	Efficiency
Examples (Contributors)	<ul style="list-style-type: none"> •Good roads, well maintained, potholes and roads repaired •Improved road surfaces •Overall good upkeep •Compared to other cities/states, roads are better condition 	<ul style="list-style-type: none"> •Excellent snow & ice removal •Clean roads, effective plowing •Roads good in all 4 seasons 	<ul style="list-style-type: none"> •Construction efficiency, quality, speed finishing projects
Example: (Detractors)	<ul style="list-style-type: none"> •Lack Paint lines hard to see, need paint improved & maintained, improve lane markings •Road surfaces worn down, potholes, rough roads •Surfaces hard to see, at night, in the rain, paint indicators worn away, can't see under snow •Rough roads, pot holes, damages cars, worse in some rural areas •Detour roads torn up from increased use, Alternate routes not same quality of main roads, not well marked 	<ul style="list-style-type: none"> •No snow removal after dark •Large piles of snow need to be removed after plowing •Limited snow removal in some rural areas •Cars blocked in by plowing 	<ul style="list-style-type: none"> •Need more funding to get the job done •Concrete vs asphalt, cost vs endurance

Category:	Mobility		
Definition:	Mobility describes movement, the actual process or experience involved with moving from one point or another and is defined as the movement of people from one place to another in the course of everyday life (Hanson, 2010).		
Subthemes:	Traffic flow & Congestion	Commute time/ travel time	Construction
Examples (Contributors)	<ul style="list-style-type: none"> •Auto movement is good in the city •Less congestion, no traffic jams, good flow of traffic •Good flow, improved with 4 lanes & bypasses •Ease of travel, roads not congested, can drive with restricted vision •No rush hour 	<ul style="list-style-type: none"> •Short distances/commutes •Can get across town fast •Speed of travel, quick to get around 	<ul style="list-style-type: none"> •New bridge open now, quick construction, safe now
Example: (Detractors)	<ul style="list-style-type: none"> •Main arteries very congested, freeways sometimes slower •Congestion, seasonal tourism traffic •Need more overpass & bypass bridges - reduce lights & congestion 	<ul style="list-style-type: none"> •Commute time increased by construction • Heavy weekend traffic on HWY •Travel time to cities •RR crossing, very long delays •Long time to get across town 	<ul style="list-style-type: none"> •Seasonal impact, results in more congestion & longer commutes •Timing of construction projects, many detours, lasts entire season, long duration of construction projects, poor signage in construction •Road construction can't keep up with demand, weather issues, major roads get priority over others, roads deteriorate "trickle down" •Construction time frame: 24/7 vs day shift only, night scheduling •Construction: Timing - done during rush hour, alt routes for construction also under construction

Category:	Safety			
Definition:	The most basic measure of state traveler safety is Minnesota traffic fatalities resulting from crashes (Mn/DOT). Multiple safety hazards exist; physical conditions, human behavior, and the interaction among these factors were frequently described as safety concerns.			
Subthemes:	Driver Behavior	Bikes & Pedestrians	Specific Features	Train and Public Transportation
Examples (Contributors)		<ul style="list-style-type: none"> •New road incorporates bike trail and walk access, safe & nice size 	<ul style="list-style-type: none"> • Rumble strips •LED lights, brighter intersections •Signs warn for delays, crashes, weather conditions •Emergency white light at intersections •Flashing yellow light to prepare for stop signs •Law enforcement response 	<ul style="list-style-type: none"> •Railroads have safer crossings, need whistle for safety
Example: (Detractors)	<ul style="list-style-type: none"> •Driver behavior - people not following rules, pass on right, •Cell phone use / texting while driving •Traffic speed vs posted limit, drivers going too fast, speed limits too high 	<ul style="list-style-type: none"> •Need more sidewalks and crossing guards •Bike accidents, bike transport safety (for worker's commute) bike safety off trails, running lights, too many bikes on the highway, bikers riding against traffic •Pedestrian safety for Right turns 	<ul style="list-style-type: none"> •Bad intersections & dangerous trouble areas •Exit/entrance on ramps on loop intersections •Round-a-bouts – dangerous & confusing •Deer crossing •Fog line and paint indicators hard to see (night, rain) •evacuation/safety concerns, limited transit options without private vehicle 	<ul style="list-style-type: none"> •Public transit safety concerns, Buses - safety and access for older people, bus safety, intimidating to use. •Buses driving too fast •Dangerous railroad crossings

Category:	Transparency	
Definition:	In a 2009 Transportation Performance Report, Mn/DOT measured transparency in terms of getting construction projects out for bid on schedule. The objective of the agency is to deliver construction projects on the schedule announced to communities, contractors and travelers (Mn/DOT). Respondents indicated transparency included communication, planning and finances.	
Subthemes:	Communications & Planning	Finances
Examples (Contributors)	<ul style="list-style-type: none"> •551 works well 	<ul style="list-style-type: none"> •Funding allocated per capita
Example: (Detractors)	<ul style="list-style-type: none"> •Better communication with public •Create openness (online) •Reduce politics of the Department •Change Department mission (service to the system user) •Research more innovative strategies (for example concrete versus asphalt) 	<ul style="list-style-type: none"> • Transparency in budget •Long range funding of MnDOT